

FORM PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket No.: COOL-01400

Serial No.: 10/612,241

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Applicants: James Lovette et al.

(37 CFR § 1.98(b))

Filing Date: July 1, 2003

Group Art Unit: 3743

U.S. PATENT DOCUMENTS

Examiner Initials		Serial / Patent Number	Issue Date	Applicant / Patentee	Class	Subclass	Filing Date
TD	AA	5,179,500	01/12/93	Koubek et al.	361	385	04/02/91
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						
	AM						
	AN						
	AO						
	AP						
	AQ						
	AR						
	AS						
	AT						
	AU						
	AV						
	AW						
	AX						
	AY						
	AZ						
	BA						
	BB						
	BC						
	BD						
	BE						
	BF						
	BG						
	BH						

Examiner:

Date Considered:

EXAMINER:

Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of Invention

MULTI-LEVEL MICROCHANNEL HEAT EXCHANGERS

Application Number : 10/612241



Confirmation Number: 3319

First Named Applicant: James Lovette

Attorney Docket Number:

Art Unit:

Examiner:

Search string: (5043797 or 5490117 or 5740013 or 5763951 or 5768104 or 5921087 or 6366467 or 6459581 or 6600220 or 6743664 or 20020121105 or 20030121274 or 20040040695 or 20040052049 or 20040089008 or 20040125561 or 20040160741 or 20040188069).pn

Certification: This Information Disclosure Statement was submitted under the following conditions, which satisfies the requirement under 37 CFR 1.97(e). The filer certified:

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
M	1	5043797	1991-08-27	Lopes			
M	2	5490117	1996-02-06	Oda et al.			
	3	5740013	1998-04-14	Roesner et al.			
	4	5763951	1998-06-09	Hamilton et al.			
	5	5768104	1998-06-16	Salmonson et al.			
	6	5921087	1999-07-13	Bhatia et al.			
	7	6366467	2002-04-02	Patel et al.	B1		
	8	6459581	2002-10-01	Newton et al.	B1		
	9	6600220	2003-07-29	Barber et al.	B2		
M	10	6743664	2004-07-01	Liang et al.	B2		

US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
TD	1	20020121105	2002-09-05	McCarthy, Jr. et al.	A1		
TD	2	20030121274	2003-07-03	Wightman	A1		
TD	3	20040040695	2004-03-04	Chesser et al.	A1		
TD	4	20040052049	2004-03-18	Wu et al.	A1		
TD	5	20040089008	2004-05-13	Tilton et al.	A1		
TD	6	20040125561	2004-07-01	Gwin et al.	A1		
TD	7	20040160741	2004-08-19	Moss et al.	A1		
TD	8	20040188069	2004-09-30	Tomioka et al.	A1		

Signature

Examiner Name	Date
<i>Shanley</i>	3/31/05



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18
Stylesheet Version v18.0

Title of
Invention

MULTI-LEVEL MICROCHANNEL HEAT EXCHANGERS

Application Number: 10/612241



Confirmation Number: 3319

First Named Applicant: James Lovette

Attorney Docket Number:

Search string: (3817321 or 4109707 or 4312012 or 4450472
or 4485429 or 4516632 or 4561040 or 4567505
or 4573067 or 4758926 or 4866570 or 4868712
or 4894709 or 4896719 or 4908112 or 4938280
or 5009760 or 5016138 or 5057908 or 5070040
or 5083194 or 5088005 or 5099311 or 5099910
or 5125451 or 5131233 or 5203401 or 5218515
or 5232047 or 5239200 or 5263251 or 5274920
or 5309319 or 5317805 or 5325265 or 5380956
or 5383340 or 5427174 or 5436793 or 5459099
or 5508234 or 5514832 or 5514906 or 5544696
or 5548605 or 5575929 or 5585069 or 5641400
or 5692558 or 5696405).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
TD	1	3817321	1974-06-18	von Cube et al.			
TD	2	4109707	1978-08-29	Wilson et al.			
TD	3	4312012	1982-01-19	Frieser et al.			
TD	4	4450472	1984-05-22	Tuckerman et al.			
TD	5	4485429	1984-11-27	Mittal .			
TD	6	4516632	1985-05-14	Swift et al.			
TD	7	4561040	1985-12-24	Eastman et al.			
TD	8	4567505	1986-01-28	Pease et al.			
TD	9	4573067	1986-02-25	Tuckerman et al.			
TD	10	4758926	1988-07-19	Herrell et al.			
TD	11	4866570	1989-09-12	Porter			

12	4868712	1989-09-19	Woodman
13	4894709	1990-01-16	Phillips et al.
14	4896719	1990-01-30	O'Neill et al.
15	4908112	1990-03-13	Pace
16	4938280	1990-07-03	Clark
17	5009760	1991-04-23	Zare et al.
18	5016138	1991-05-14	Woodman
19	5057908	1991-10-15	Weber
20	5070040	1991-12-03	Pankove
21	5083194	1992-01-21	Bartilson
22	5088005	1992-02-11	Ciaccio
23	5099311	1992-03-24	Bonde et al.
24	5099910	1992-03-31	Walpole et al.
25	5125451	1992-01-30	Matthews
26	5131233	1992-07-21	Cray et al.
27	5203401	1993-04-20	Hamburgen et al.
28	5218515	1993-06-08	Bernhardt
29	5232047	1993-08-03	Matthews
30	5239200	1993-08-24	Messina et al.
31	5263251	1993-11-23	Matthews
32	5274920	1994-01-04	Matthews
33	5309319	1994-05-03	Messina
34	5317805	1994-06-07	Hoopman et al.
35	5325265	1994-06-28	Turlik et al.
36	5380956	1995-01-10	Loo et al.
37	5383340	1995-01-24	Larson et al.
38	5427174	1995-06-27	Lomolino, Sr. et al.
39	5436793	1995-07-25	Sanwo et al.
40	5459099	1995-10-17	Hsu
41	5508234	1996-04-16	Dusablon, Sr. et al.
42	5514832	1996-05-07	Dusablon, Sr. et al.
43	5514906	1996-05-07	Love et al.
44	5544696	1996-08-13	Leland
45	5548605	1996-08-20	Benett et al.
46	5575929	1996-11-19	Yu et al.
47	5585069	1996-12-17	Zanzucchi et al.

TD	48	5641400	1997-06-24	Kaltenbach et al.
TD	49	5692558	1997-12-02	Hamilton et al.
TD	50	5696405	1997-12-09	Weld

Signature

Examiner Name	Date
<i>Cham Dwyer</i>	3/31/05



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of
Invention

MULTI-LEVEL MICROCHANNEL HEAT EXCHANGERS

Application Number: 10/612241



Confirmation Number: 3319

First Named Applicant: James Lovette

Attorney Docket Number:

Search string: (6443222 or 6444461 or 6457515 or 6537437
or 6543521 or 6553253 or 6588498 or 6591625
or 6632655 or 20010016985 or 20010024820 or
20010045270 or 20010046703).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
TD	1	6443222	2002-09-03	Yun et al.	B1		
TD	2	6444461	2002-09-03	Knapp et al.	B1		
TD	3	6457515	2002-10-01	Vafai et al.	B1		
TD	4	6537437	2003-03-25	Galambos et al.	B1		
TD	5	6543521	2003-04-08	Sato et al.	B1		
TD	6	6553253	2003-04-22	Chang	B1		
TD	7	6588498	2003-07-08	Reysin et al.	B1		
TD	8	6591625	2003-07-15	Simon	B1		
TD	9	6632655	2003-10-14	Mehta et al.	B1		

US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
TD	1	20010016985	2001-08-30	Insley et al.	A1		
TD	2	20010024820	2001-09-27	Mastromatteo et al.	A1		
TD	3	20010045270	2001-11-29	Bhatti	A1		

TD	4	20010046703	2001-11-29	Burns et al.	A1
----	---	-------------	------------	--------------	----

Signature


Examiner Name	Date
<i>Thermon</i>	3/31/05



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of Invention	MULTI-LEVEL MICROCHANNEL HEAT EXCHANGERS						
Application Number:	10/612241						
Confirmation Number:	3319						
First Named Applicant:	James Lovette						
Attorney Docket Number:							
Search string:	(5727618 or 5774779 or 5800690 or 5801442 or 5835345 or 5858188 or 5863708 or 5870823 or 5880524 or 5874795 or 5901037 or 5936192 or 5964092 or 5965001 or 5997713 or 5998240 or 6007309 or 6054034 or 6068752 or 6090251 or 6096656 or 6100541 or 6101715 or 6126723 or 6129145 or 6131650 or 6146103 or 6159353 or 6174675 or 6176962 or 6186660 or 6210986 or 6216343 or 6221226 or 6234240 or 6238538 or 6301109 or 6313992 or 6317326 or 6321791 or 6322753 or 6324058 or 6337794 or 6351384 or 6415860 or 6417060 or 6388317 or 6400012 or 6406605 or 6424531).pn.						
US Patent Documents							
Note: Applicant is not required to submit a paper copy of cited US Patent Documents							
init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
TD	1	5727618	1998-03-17	Munding et al.			
TD	2	5774779	1998-06-30	Tuchinskiy			
TD	3	5800690	1998-09-01	Chow et al.			
TD	4	5801442	1998-09-01	Hamilton et al.			
TD	5	5835345	1998-11-10	Staskus et al.			
TD	6	5858188	1999-01-12	Soane et al.			
TD	7	5863708	1999-01-26	Zanzucchi et al.			
TD	8	5870823	1999-02-16	Bezama et al.			
TD	9	5880524	1999-03-09	Xie			
TD	10	5874795	1999-02-23	Sakamoto			
TD	11	5901037	1999-05-04	Hamilton et al.			

12	5936192	1999-08-10	Tauchi	
13	5964092	1999-10-12	Tozuka et al.	
14	5965001	1999-10-12	Chow et al.	
15	5997713	1999-12-07	Beetz, Jr. et al.	
16	5998240	1999-12-07	Hamilton et al.	
17	6007309	1999-12-28	Hartley	
18	6054034	2000-04-25	Soane et al.	
19	6068752	2000-05-30	Dubrow et al.	
20	6090251	2000-07-18	Sundberg et al.	
21	6096656	2000-08-01	Matzke et al.	
22	6100541	2000-08-08	Nagle et al.	
23	6101715	2000-08-15	Fuesser et al.	
24	6126723	2000-10-03	Drost et al.	
25	6129145	2000-10-10	Yamamoto et al.	
26	6131650	2000-10-17	North et al.	
27	6146103	2000-11-14	Lee et al.	
28	6159353	2000-12-12	West et al.	
29	6174675	2001-01-16	Chow et al.	B1
30	6176962	2001-01-23	Soane et al.	B1
31	6186660	2001-02-13	Kopf-Sill et al.	B1
32	6210986	2001-04-03	Arnold et al.	B1
33	6216343	2001-04-17	Leland et al.	B1
34	6221226	2001-04-24	Kopf-Sill	B1
35	6234240	2001-05-22	Cheon	B1
36	6238538	2001-05-29	Parce et al.	B1
37	6301109	2001-10-09	Chu et al.	B1
38	6313992	2001-11-06	Hildebrandt	B1
39	6317326	2001-11-13	Vogel et al.	B1
40	6321791	2001-11-27	Chow	B1
41	6322753	2001-11-27	Lindberg et al.	B1
42	6324058	2001-11-27	Hsiao	B1
43	6337794	2002-01-08	Agonafer et al.	B1
44	6351384	2002-02-26	Daikoku et al.	B1
45	6415860	2002-07-09	Kelly et al.	B1
46	6417060	2002-07-09	Tavkhelidze et al.	B1
47	6388317	2002-05-14	Reese	B1

TD	48	6400012	2002-06-04	Miller et al.	B1
TD	49	6406605	2002-06-18	Moles	B1
TD	50	6424531	2002-07-23	Bhatti et al.	B1

Signature

Examiner Name	Date
<i>Sharon Dwyer</i>	3/31/03



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of Invention	MULTI-LEVEL MICROCHANNEL HEAT EXCHANGERS																																																																																																																																						
<p>Application Number: 10/612241</p> <p>Confirmation Number: 3319</p> <p>First Named Applicant: James Lovette</p> <p>Attorney Docket Number:</p> <p>Search string: (4467861 or 4903761 or 5016090 or 5269372 or 5275237 or 5310440 or 5346000 or 5388635 or 5945217 or 6019165 or 6034872 or 6039114 or 6253832 or 6257320 or 6330907 or 6336497 or 6366462 or 6367544 or 6431260 or 6466442 or 6519151 or 6533029 or 6536516 or 6601643 or 6609560 or 6651735 or 20030213580).pn.</p> <p>US Patent Documents</p> <p>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</p> <table border="1"><thead><tr><th>init</th><th>Cite.No.</th><th>Patent No.</th><th>Date</th><th>Patentee</th><th>Kind</th><th>Class</th><th>Subclass</th></tr></thead><tbody><tr><td>TD</td><td>1</td><td>4467861</td><td>1984-08-28</td><td>Kiseev et al.</td><td></td><td></td><td></td></tr><tr><td>TD</td><td>2</td><td>4903761</td><td>1990-02-27</td><td>Cima</td><td></td><td></td><td></td></tr><tr><td>TD</td><td>3</td><td>5016090</td><td>1991-05-14</td><td>Galyon et al.</td><td></td><td></td><td></td></tr><tr><td>TD</td><td>4</td><td>5269372</td><td>1993-12-14</td><td>Chu et al.</td><td></td><td></td><td></td></tr><tr><td>TD</td><td>5</td><td>5275237</td><td>1994-01-04</td><td>Rolfson et al.</td><td></td><td></td><td></td></tr><tr><td>TD</td><td>6</td><td>5310440</td><td>1994-05-10</td><td>Zingher</td><td></td><td></td><td></td></tr><tr><td>TD</td><td>7</td><td>5346000</td><td>1994-09-13</td><td>Schlitt</td><td></td><td></td><td></td></tr><tr><td>TD</td><td>8</td><td>5388635</td><td>1995-02-14</td><td>Gruber et al.</td><td></td><td></td><td></td></tr><tr><td>TD</td><td>9</td><td>5945217</td><td>1999-08-31</td><td>Hanrahan</td><td></td><td></td><td></td></tr><tr><td>TD</td><td>10</td><td>6019165</td><td>2000-02-01</td><td>Batchelder</td><td></td><td></td><td></td></tr><tr><td>TD</td><td>11</td><td>6034872</td><td>2000-03-07</td><td>Chrysler et al.</td><td></td><td></td><td></td></tr><tr><td>TD</td><td>12</td><td>6039114</td><td>2000-03-21</td><td>Becker et al.</td><td></td><td></td><td></td></tr><tr><td>TD</td><td>13</td><td>6253832</td><td>2001-07-03</td><td>Hallefalt</td><td>B1</td><td></td><td></td></tr><tr><td>TD</td><td>14</td><td>6257320</td><td>2001-07-10</td><td>Wargo</td><td>B1</td><td></td><td></td></tr><tr><td>TD</td><td>15</td><td>6330907</td><td>2001-12-18</td><td>Ogushi et al.</td><td>B1</td><td></td><td></td></tr></tbody></table>								init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass	TD	1	4467861	1984-08-28	Kiseev et al.				TD	2	4903761	1990-02-27	Cima				TD	3	5016090	1991-05-14	Galyon et al.				TD	4	5269372	1993-12-14	Chu et al.				TD	5	5275237	1994-01-04	Rolfson et al.				TD	6	5310440	1994-05-10	Zingher				TD	7	5346000	1994-09-13	Schlitt				TD	8	5388635	1995-02-14	Gruber et al.				TD	9	5945217	1999-08-31	Hanrahan				TD	10	6019165	2000-02-01	Batchelder				TD	11	6034872	2000-03-07	Chrysler et al.				TD	12	6039114	2000-03-21	Becker et al.				TD	13	6253832	2001-07-03	Hallefalt	B1			TD	14	6257320	2001-07-10	Wargo	B1			TD	15	6330907	2001-12-18	Ogushi et al.	B1		
init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass																																																																																																																																
TD	1	4467861	1984-08-28	Kiseev et al.																																																																																																																																			
TD	2	4903761	1990-02-27	Cima																																																																																																																																			
TD	3	5016090	1991-05-14	Galyon et al.																																																																																																																																			
TD	4	5269372	1993-12-14	Chu et al.																																																																																																																																			
TD	5	5275237	1994-01-04	Rolfson et al.																																																																																																																																			
TD	6	5310440	1994-05-10	Zingher																																																																																																																																			
TD	7	5346000	1994-09-13	Schlitt																																																																																																																																			
TD	8	5388635	1995-02-14	Gruber et al.																																																																																																																																			
TD	9	5945217	1999-08-31	Hanrahan																																																																																																																																			
TD	10	6019165	2000-02-01	Batchelder																																																																																																																																			
TD	11	6034872	2000-03-07	Chrysler et al.																																																																																																																																			
TD	12	6039114	2000-03-21	Becker et al.																																																																																																																																			
TD	13	6253832	2001-07-03	Hallefalt	B1																																																																																																																																		
TD	14	6257320	2001-07-10	Wargo	B1																																																																																																																																		
TD	15	6330907	2001-12-18	Ogushi et al.	B1																																																																																																																																		



TD	16	6336497	2002-01-08	Lin	B1
TD	17	6366462	2002-04-02	Chu et al.	B1
TD	18	6367544	2002-04-09	Calaman	B1
TD	19	6431260	2002-08-13	Agonafer et al.	B1
TD	20	6466442	2002-10-15	Lin	B2
TD	21	6519151	2003-02-11	Chu et al.	B2
TD	22	6533029	2003-03-18	Phillips	B1
TD	23	6536516	2003-03-25	Davies et al.	B2
TD	24	6601643	2003-08-05	Cho et al.	B2
TD	25	6609560	2003-08-26	Cho et al.	B2
TD	26	6651735	2003-11-25	Cho et al.	B2

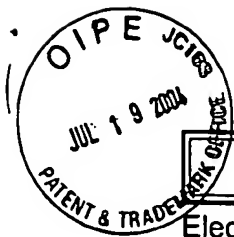
US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
TD	1	20030213580	2003-11-20	Philpott et al.	A1		

Signature

Examiner Name	Date
<i>Thammy</i>	3/31/05



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of
Invention

MULTI-LEVEL MICROCHANNEL HEAT EXCHANGERS

Application Number: 10/612241



Confirmation Number: 3319

First Named Applicant: James Lovette

Attorney Docket Number:

Search string: (3948316 or 5161089 or 5228502 or 5239443
or 5265670 or 5978220 or 5993750 or
6729383).pn.

Certification: This Information Disclosure Statement was submitted under the following conditions, which satisfies the requirement under 37 CFR 1.97(e). The filer certified:

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
TD	1	3948316	1976-04-06	Souriau			
TD	2	5161089	1992-11-03	Chu et al.			
TD	3	5228502	1993-07-20	Chu et al.			
TD	4	5239443	1993-08-24	Fahey et al.			
TD	5	5265670	1993-11-30	Zingher			
TD	6	5978220	1999-11-02	Frey et al.			
TD	7	5993750	1999-11-30	Ghosh et al.			
TD	8	6729383	2004-05-04	Cannell et al.	B1		

Jul 19 2004

Signature

Examiner Name	Date
<i>Thermon</i>	3/3/05